



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

APR 15 2015

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL # 7009 1680 0000 7677 9142
RETURN RECEIPT REQUESTED

Mr. James T. Robertson
Registered Agent for Modern Day Mining and Refining
236 3rd Street Southwest
Canton, Ohio 44702

Re: Notice of Violation
Compliance Evaluation Inspection
EPA ID No. OHD004469300

Dear Mr. Robertson:

On March 12, 2013, representatives of the U.S. Environmental Protection Agency and Ohio Environmental Protection Agency inspected the Modern Day Mining and Refining facility located in Canton, Ohio. As a "generator" of hazardous waste, Modern Day Mining & Refining is subject to the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 *et seq.* (RCRA). The purpose of the inspection was to evaluate Modern Day Mining & Refining's compliance with certain provisions of RCRA and its implementing regulations related to the generation, treatment and storage of hazardous waste. A copy of the inspection report is enclosed for your reference.

Based on information provided by Modern Day Mining & Refining, EPA's review of records pertaining to Modern Day Mining & Refining, and the inspectors' observations, EPA has determined that Modern Day Mining & Refining has unlawfully stored hazardous waste without a permit or interim status as a result of Modern Day Mining & Refining's failure to comply with certain conditions for a permit exemption as a small or large quantity generator under Ohio Admin. Code § 3745-52-34(A)-(C) [40 C.F.R. § 262.34(a)-(c)] or under Ohio Admin. Code § 3745-52-34(D)-(F) [40 C.F.R. § 262.34(d)-(f)], respectively. EPA has identified the permit exemption conditions with which Modern Day Mining & Refining was out of compliance at the time of the inspection in paragraph 1, below.

STORAGE OF HAZARDOUS WASTE WITHOUT A PERMIT OR INTERIM STATUS AND VIOLATIONS OF TSD REQUIREMENTS

During the period of records reviewed during the inspection, Modern Day Mining & Refining was out of compliance with the following large quantity generator or small quantity generator permit exemption conditions:

1. Use and Management of Containers

Under Ohio Admin. Code §§ 3745-52-34(A)(1)(i) and 3745-66-73(A) [40 C.F.R. §§ 262.34(a)(1)(i) and 265.173(a)], a large quantity generator must always keep a container holding hazardous waste closed during storage, except when it is necessary to add or remove waste. Under Ohio Admin. Code §§ 3745-52-34(D)(2) and 3745-66-73(A) [40 C.F.R. §§ 262.34(d)(2) and 265.173(a)], a small quantity generator must always keep a container holding hazardous waste closed during storage, except when it is necessary to add or remove waste.

At the time of the inspection, Modern Day Mining & Refining did not keep its 55-gallon drums of cyanide-containing waste closed during storage. Waste was not being added or removed to these 55-gallon drums while they were open.

Many of the conditions for a RCRA permit exemption are also independent requirements that apply to permitted and interim status hazardous waste management facilities that treat, store, or dispose of hazardous waste (TSD requirements). When a hazardous waste generator loses its permit exemption due to a failure to comply with an exemption condition incorporated from Ohio Admin. Code chs. 3745-65 to 68 and 3745-256, the generator: (a) becomes an operator of a hazardous waste storage facility; and (b) simultaneously violates the corresponding TSD requirement. The exemption conditions identified in paragraph 1 are also independent TSD requirements incorporated from Ohio Admin. Code chs. 3745-65 to 68 and 3745-256. Accordingly, each failure of Modern Day Mining & Refining to comply with these conditions is also a violation of the corresponding requirement in Ohio Admin. Code chs. 3745-54 to 57 and 3745-205 [40 C.F.R. Part 264].

Summary: By failing to comply with the conditions for a permit exemption, above, Modern Day Mining & Refining became an operator of a hazardous waste storage facility, and was required to obtain an Ohio hazardous waste storage permit. Modern Day Mining & Refining failed to apply for such a permit. Modern Day Mining & Refining's failure to apply for and obtain a hazardous waste storage permit violated the requirements of Ohio Admin. Code §§ 3745-50-45(A) and 3745-50-41(A) and (D) [40 C.F.R. §§ 270.1(c), and 270.10(a) and (d)]. Any failure to comply with a permit exemption condition incorporated from Ohio Admin. Code chs. 3745-65 to 68 and 3745-256 is also an independent violation of the corresponding TSD requirement.

Finally, EPA has determined that Modern Day Mining & Refining violated RCRA requirements related to hazardous waste determinations.

OTHER VIOLATION

Modern Day Mining & Refining violated the following hazardous waste generator requirements:

2. Hazardous Waste Determination

Under Ohio Admin. Code § 3745-52-11 [40 C.F.R. § 262.11], a generator must determine whether its waste is hazardous.

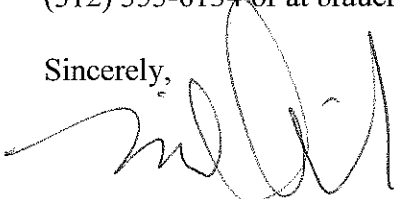
At the time of the inspection, Modern Day Mining & Refining had not made a determination whether the waste generated as cyanide waste, copper recovery, rubber solvent, caustic solution including 4% potassium hydroxide, waste potassium hydroxide rinse water, and Cosmoline remover were hazardous. As subsequently documented by the Ohio Environmental Protection Agency, Modern Day Mining & Refining accumulated some of these wastes for longer than one calendar year without recycling 75% of each waste type that was present at the beginning of the calendar year.

Because Modern Day Mining & Refining has been evicted from 818 Mulberry Road SE Suite M in Canton, Ohio by the lessor, EPA is not requiring Modern Day Mining & Refining to apply for an Ohio hazardous waste storage permit.

According to Section 3008(a) of RCRA, EPA may issue an order assessing a civil penalty for any past or current violation, requiring compliance immediately or within a specified time period, or both. Although this letter is not such an order or a request for information under Section 3007 of RCRA, 42 U.S.C. § 6927, we request that you submit a response in writing to us no later than 30 days after receipt of this letter documenting the actions, if any, which you have taken since the inspection to establish compliance with the above conditions for a permit exemption or the other hazardous waste regulations. You should submit your response to Ms. Sue Brauer, U.S. EPA, Region 5, 77 West Jackson Boulevard, LR-8J, Chicago, Illinois 60604.

If you have any questions regarding this letter, please contact Ms. Sue Brauer, of my staff, at (312) 353-6134 or at brauer.sue@epa.gov.

Sincerely,



Gary J. Victorine, Chief
RCRA Branch

Enclosure

cc: Robert.Almquist@epa.ohio.gov, Ohio EPA
Teri.Finfrock@epa.ohio.gov, Ohio EPA



U. S. Environmental Protection Agency
Region 5, Land and Chemicals Division
RCRA Branch
77 West Jackson Boulevard
Chicago, Illinois 60604

RCRA COMPLIANCE EVALUATION INSPECTION REPORT

SITE NAME: MODERN DAY MINING & REFINING

EPA ID NUMBER: OHD004469300

ADDRESS: 818 Mulberry Road SE Suite M
Canton, Ohio 44707

DATE OF INSPECTION: March 12, 2013

EPA INSPECTOR: Sue Rodenbeck Brauer
Environmental Scientist

PREPARED BY:

Sue Rodenbeck Brauer October 24, 2013
Sue Rodenbeck Brauer Date
Compliance Section 2

ACCEPTED BY:

Julie Morris
Julie Morris, Chief
Compliance Section 2

10/28/13
Date

Purpose of Inspection

This inspection was an evaluation of Modern Day Mining & Refining's (MDMR's) compliance with hazardous waste regulations found at OAC 3745-50-01 et seq. and Title 40 of the Code of Federal Regulations, Parts 260-279 (40 CFR 260-279). I performed the inspection with Mr. Robert Almquist of Ohio Environmental Protection Agency (OEPA). The inspection was an EPA led Resource Conservation and Recovery Act (RCRA) compliance evaluation inspection (CEI). The site notified as a hazardous waste large quantity generator (LQG) and exempt furnace, presumably pursuant to 40 CFR 266.100(d) or (g).

Participants

Inspector(s):

Sue Rodenbeck Brauer, Environmental Scientist, Land and Chemicals Division, Region 5 EPA
Robert Almquist, Environmental Specialist II, Div. of Materials and Waste Management, OEPA

Site Representative(s):

Brett S. Stimer, CEO, Modern Day Mining & Refining
Greg Cole, Process Specialist, Modern Day Mining & Refining
Brian Stimer, Vice President, PolyPro Solutions

Introduction

On March 12, 2013, the inspectors arrived at the site at approximately 10:30 a.m. We introduced ourselves and presented our inspector credentials and business cards to Mr. Brett Stimer. Mr. Brett Stimer phoned Mr. Brian Stimer, and I talked with Mr. Brian Stimer. Mr. Brian Stimer desired an appointment. I explained that RCRA compliance evaluation inspections are routinely unannounced inspections, and Mr. Brian Stimer offered to reschedule his meeting before meeting us at the MDMR facility. Mr. Brett Stimer escorted the inspectors to Mr. Greg Cole's office, and Mr. Greg Cole vacated his office. The windows of Mr. Cole's office provide a view of PolyPro Solutions' operations.

Mr. Brian Stimer arrived about 11:05 a.m. He told the inspectors his daily frustrations. Mr. Brian Stimer described his background as including sale of industrial chemicals and 23 years in the telecommunications business. I described the typical RCRA inspection as consisting of an office overview, site tour, and records review. Mr. Brian Stimer described the site operations and led the tour.

I provided a Small Business Resources information sheet and the OEPA P2 tri-fold brochure to Mr. Brian Stimer. I informed Mr. Brian Stimer that MDMR could claim any information gathered during the inspection as Confidential Business information.

Site Description

During his description of facility operations, Mr. Brian Stimer did not provide a site map. He has been at this site since 2011. He described the leased area as 38,000 square feet and said that his brother owns it. He pointed out the 10-ton cranes overhead and said that WWII tanks were constructed in the building. PolyPro Solutions and MDMR share the space. PolyPro and MDMR have 21 employees. According to Mr. Brian Stimer, yellow lines distinguish PolyPro Solutions

from MDMR. As an example of the corporate relationship, Mr. Brian Stimer stated that MDMR will do work (labor) for PolyPro.

The area closest to the overhead door and parking lot is used by PolyPro Solutions for grinding and melting plastic into beads. Mr. Greg Cole keeps the plastic grinder and melting machinery running. On the day of the inspection, the baghouse was broken. Plastic was falling from the air near the baghouse. Polystyrene packing foam peanuts and blue cloth medical drapes are some of the nonhazardous wastes recycled. The virgin beads are sold for \$1.20/pound while the recycled polystyrene pellet costs \$0.50/pound. Owens Corning is a customer. (I observed a 'check melt index' countertop apparatus in Mr. Cole's office.)

Mr. Brian Stimer described his ambitions for Modern Day Mining and Refining. This paragraph contains information provided to me by Mr. Brian Stimer. MDMR is working on a process to reclaim silver from medical or industrial x-ray film. MDMR is working on reclaiming precious metals (silver and gold) from used electrical equipment, including circuit boards. More specifically, he buys circuit boards from landfills and brokers the circuit boards to refineries. He finds resalable items (e.g., boards, motors, [private branch exchange] PBX telephone systems) and buys others (e.g., 250,000 electrical meters containing aluminum, silver, and copper at \$1.25/meter paid). He wants to find a way to recycle everything on a circuit board (copper and plastic) by grinding it in one room. MDMR separated 600 pounds of copper out of a metric ton of materials. Ohio Precious Metals¹ is right off Interstate 71 but only deals in large quantities of precious metals. He is considering accepting drop-off cellphones, pagers, laptops. He would be interested in receiving redbag waste if he could get lead wires (e.g., electrocardiogram lead wires) and pacemakers. Mr. Brian Stimer is willing to drive to Pennsylvania to pick up four drums of silver-containing x-ray film.

With respect to the reclamation of silver from spent x-ray film, the film emulsion or gel has to be broken. According to Mr. Brian Stimer, MDMR is using a cyanide leach process followed by cleaning and rinsing the plastic so that it is salable. (Mr. Brian Stimer was not sure about the exact plastic composition, HPE?) An x-ray film line is to be constructed after the process is finalized through on-site pilot plant trial and error. Mr. Brian Stimer said that the use of cyanide sounds scarier than it is because it can be treated onsite using KOH or caustic soda and then discharged to the public sewer.

Mr. Brian Stimer also talked about setting up electrolytic cells for reclamation of other metals and about using nitric acid and/or hydrochloric acid.

OEPA Inspector Almquist encouraged Mr. Brian Stimer to work with the local POTW to ensure compliance with local sewer ordinances. Someone (Mr. Brian Stimer, his consultant, or the OEPA inspector) stated that the City of Canton does not have a silver limit for industrial pretreatment. Mr. George Rhode was identified as the City of Canton POTW contact.

¹ According to the publicly-traded company's website, www.opmmetals.com (accessed 10/17/2013), Ohio Precious Metals (OPM) is located in Jackson, Ohio.

Mr. Brian Stimer referred to an earlier conversation with Adrienne LaFavre of OEPA and being given “more time.” The site operations are described in the next section of this report. Many potentially hazardous materials are received from off-site.

Site Tour

The street address, 616 Mulberry Road SE, corresponds to the large industrial complex pictured below. The yellow compass tack located the address just beyond the left edge of this photo. Suite M, MDMR’s location, is entered at the southern end of the longest roofline at the yellow arrow (see map view below). Goodwill Industries occupies the space to the right as one enters MDMR. Diebold is located at the northeast end.



As one enters at the south end, PolyPro operations and offices on the east side occupy roughly the southern quarter of the space. I took all the photographs incorporated into the site tour portion of this report. At the north end of the office space, there is an area where the inspectors saw an employee checking computers to evaluate their fate, for reuse or scrap.



Picture #: P3120065

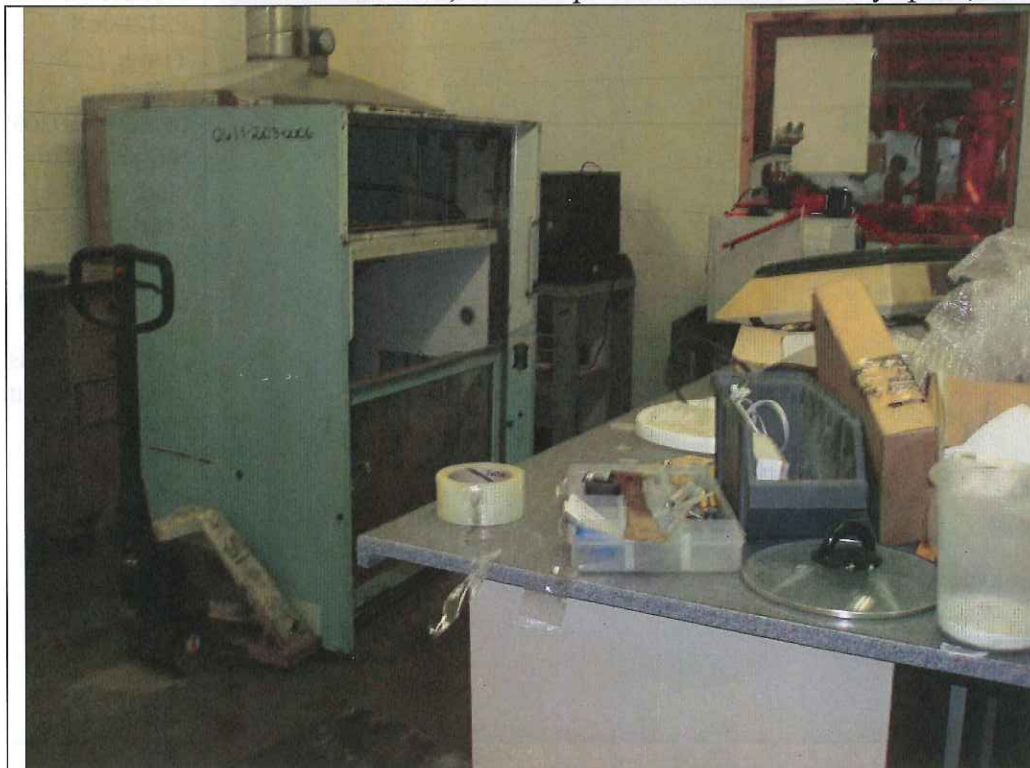
Date and Time: March 12, 2013, 1:11 pm

Photographer: Sue Brauer

Location: OHD004469300 inside facility.

Subject: These computer monitors are labeled with post-it notes stating the evaluated condition.

In addition to the built-out offices, MDMR planned some laboratory space; see P3120067.



Picture #:

P3120067

Time: 1:16

Location:

OHD004469300
inside facility.

Subject: MDMR plans to use this space for a laboratory. The fume hood has not been installed. Lab equipment includes an atomic absorption spectrophotometer.



Picture #:

P3120066

Location:

OHD004469300

Subject: The black plastic strips are an example of the industrial xray film from which MDMR expects to reclaim silver.

While some recyclable materials are sorted by type (see P3120068 and P3120069), some materials are stored as packaged when received (see P3120092, P3120094 and P3120098).



Picture #:

P3120068

Time: 1:18

Location:

OHD004469300

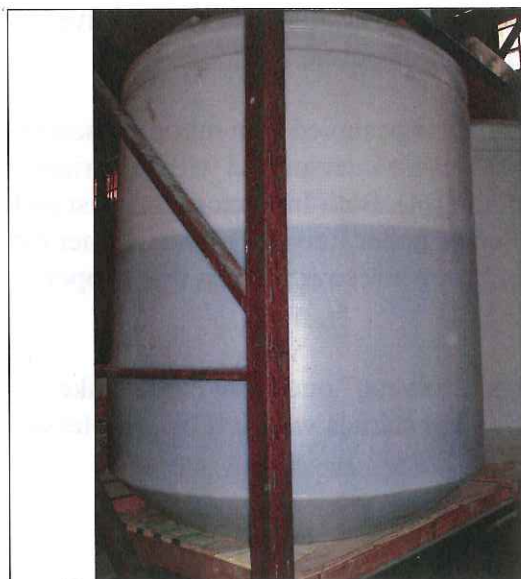
Subject: This bin contains boards with a variety of electrical parts containing precious metals. The bin is about two feet wide by three feet long.



Picture #:
P3120069
Time: 1:18
Location:
OHD004469300
Subject:
Similar-looking
electrical parts
to be recycled

Mr. Brian Stimer was able to identify most of the electrical parts during the inspection.

As the tour proceeded north along the east side of the building, I observed the pilot plant for batch silver reclamation from used x-ray film. The pilot plant consisted of two large vertical cylindrical elevated tanks, one with a mixer/stirrer (photos P3120070 and P3120071), one square tank and two smaller vertical cylindrical tanks. The square tank and two smaller cylindrical tanks are placed on the floor.



Picture #: P3120070
Time: 1:24 p.m.
Location: OHD004469300, east side of leased building.
Subject: Looking east northeast at a large vertical plastic tank that is part of the batch pilot plant for silver reclamation from x-ray film. The fluid level in the tank is easily seen about halfway between tank top and tank bottom. The tank is elevated on a platform above the concrete floor. I estimate the tank height as 6 feet and the diameter as 4 feet. The volume for a 45° cone bottom tank with those dimensions is 500 gallons (www.plastic-mart.com).



Picture #: P3120071

Location: : OHD004469300, east side of leased building.

Subject: Looking southeast at the same large pilot plant cone-bottom processing tanks seen in P3120070. Note the tank stirrer motor installed above the western tank. A one ton crane is overhead. An air diaphragm pump is installed below the tank platform. Unfortunately, the tank labels are not legible in this photograph. There is a blue plastic 55-gallon drum (about three feet tall by 2 feet in diameter) on the lower right for scale. The platform is about four feet above the ground.

The two smaller cylindrical tanks and square tank (volume est. as 300 gallons by me) are to the left, closer to the east wall. According to Mr. Brian Stimer, the same "water" can be used five times, then it is no longer effective and has to be neutralized and disposed.

North of the PolyPro operations, the central floor of the facility is occupied by a mix of unsorted materials to be recycled. For example, electronics (P3120072) were interspersed with materials used in (P3120073) or produced from silver reclamation (P3120074). Both Inspector Almquist and I recorded in our notes the presence of a plastic drum labeled "Copper Recovery." Mr. Stimer did not know the composition of the liquid in the drum labeled "copper recovery," just that copper (and nickel) is valuable so he was going to reclaim it.

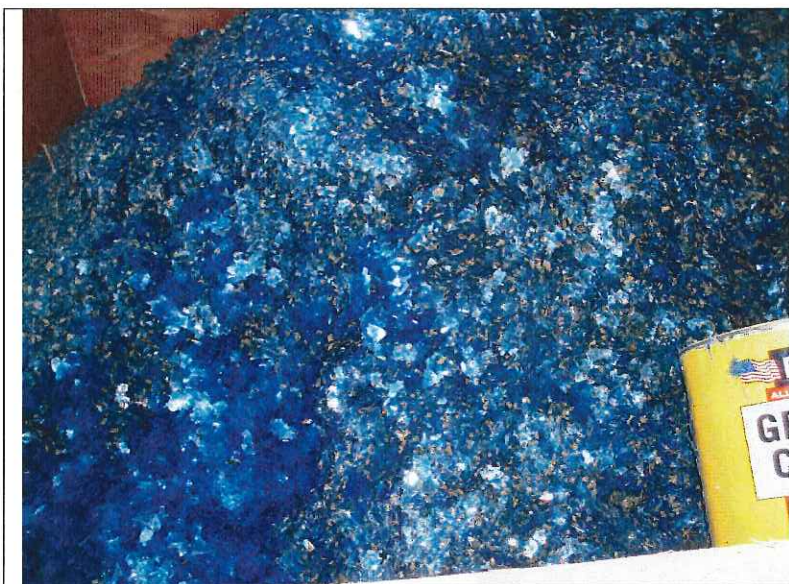
Both inspectors also noted two rusted drums labeled "Rubber Solvent," one drum of air brake system antifreeze, and containers of dust mop treatment. Some materials were left by a sublessor, Roko Alloys, according to Mr. Brian Stimer.



Picture #:
P3120072
Time: 1:37 pm
Location:
OHD004469300,
central area of
leased building.
Subject: There
is no
distinguishing
labeling to
indicate
whether these
will be reused
or dismantled
for
reclamation.



Picture #: P3120073
Time: 1:40 pm
Location: OHD004469300, central
area of leased building.
Subject: The black strips of plastic
are x-ray films. Some films are still
in protective manila paper sleeves.



Picture #: P3120074

Time: 1:40

Location: OHD004469300, central area of leased building.

Subject: Mr. Brian Stimer told the inspectors that these x-ray film chips were processed to remove the silver from the film's gel emulsion. The plastic chips are in an open top crate about four feet cubed.

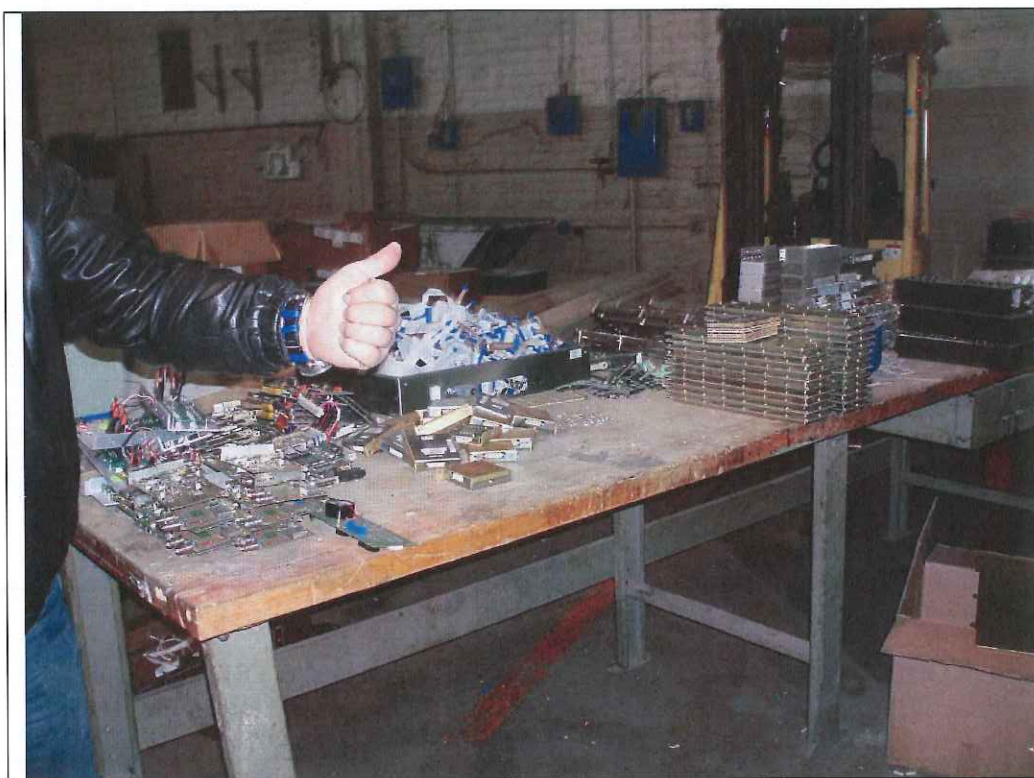


Picture #: P3120075

Time: 1:41 p.m.

Location: OHD004469300, central area of leased building.

Subject: Wooden crates like this are used to manage processed materials like the plastic from film shown in P3120074.

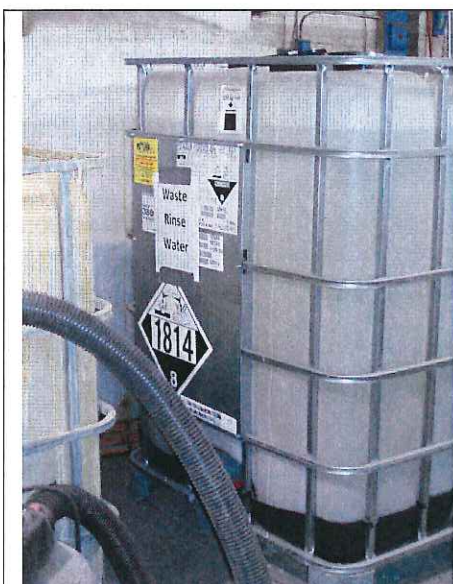


Picture #: P3120076
Time: 1:42 p.m. **Location:** Along east wall of OHD004469300
Subject: Metals and electrical parts are separated from circuit boards at MDMR as observed by the inspectors. Mr. Brian Stimer was standing to the left of the work table.

Totes of used liquids are adjacent to sorted metals and boards. See P3120077, 3120078 and 3120079, a left-to-right scene. Mr. Brian Stimer identified the "waste rinse water" totes shown below (P3120077 and P3120078) as used and going to be used again. The totes were used by Mike Rock of Roko Alloys according to Mr. Brian Stimer.



Picture #: P3120077
Time: 1:43 p.m. **Location:** central area of OHD004469300
Subject: Metals are physically separated from circuit boards at MDMR, as shown here. Note tote and shop vac.



Picture #: P3120078

Time: 1:44 p.m.

Location: central area of OHD004469300

Subject: Mr. Brian Stimer identified the contents of this tote as potassium hydroxide waste rinse water.



Picture #: P3120079

Time: 1:44 p.m.

Location: central area of OHD004469300

Subject: This is a second tote of the same waste as shown in P3120078

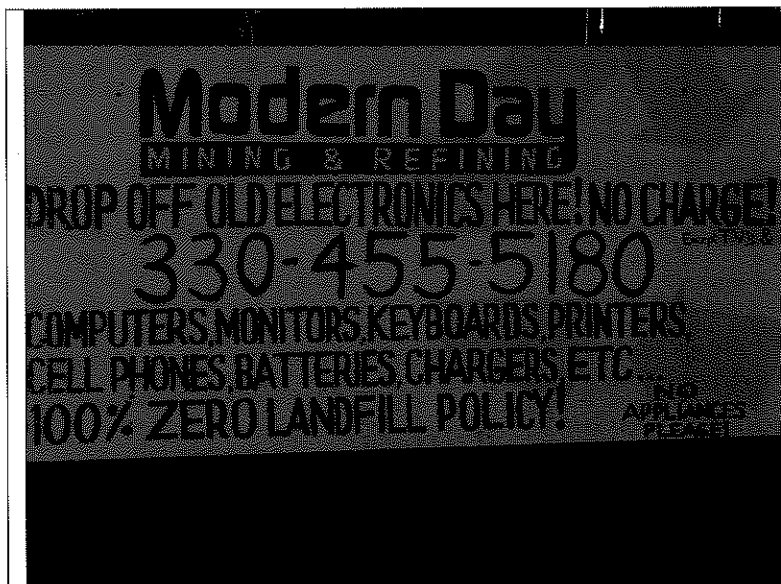


Picture #: P3120080

Time: 1:46 p.m.

Location: central area of OHD004469300

Subject: According to Mr. Brian Stimer, these are computer CPUs.

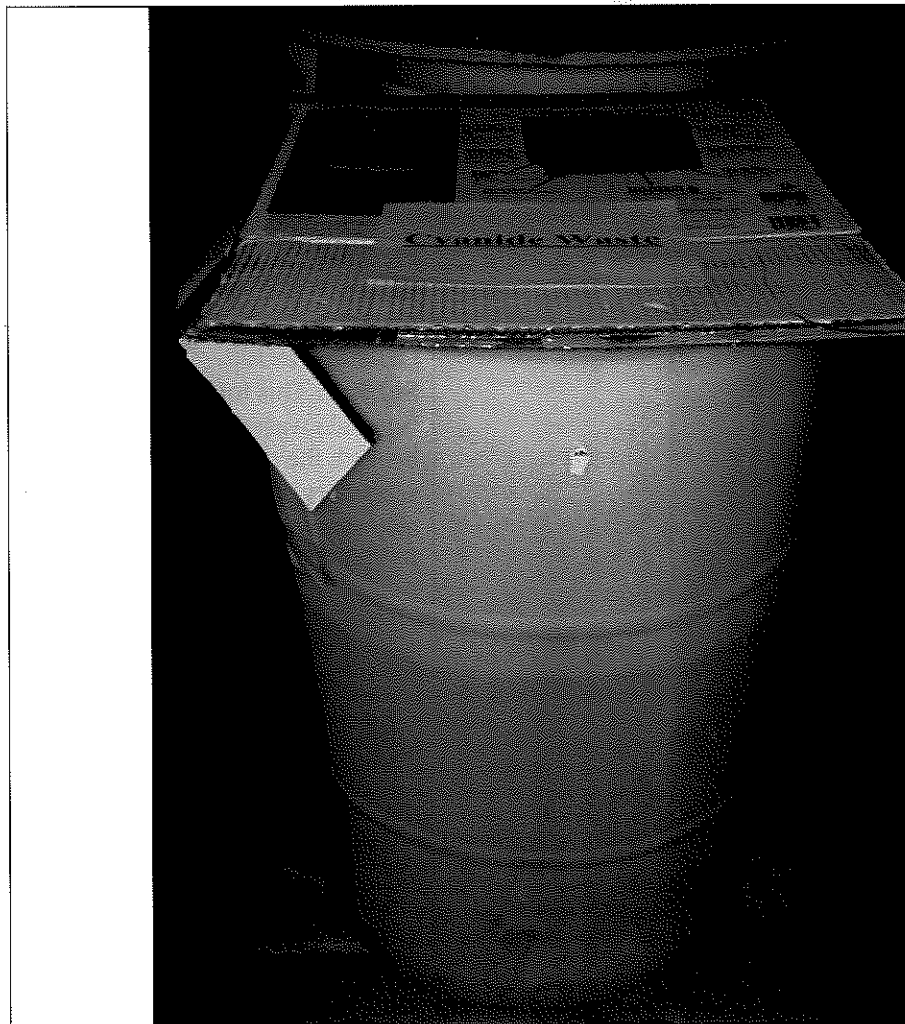


Picture #: P3120081

Time: 1:55 p.m.

Location: central area of
OHD004469300

Subject: Mr. Brian Stimer told Inspector Almquist and me that he was considering accepting drop-off electronics. This sign hadn't been posted yet. The photo was taken inside the MDMR building.



Picture #: P3120082

Time: 1:56 p.m.

Location: east side of
central area of
OHD004469300

Subject: This drum labeled, "Cyanide Waste," is 3/5 full. The open top of the drum is not closed. It is covered with a flattened cardboard box.



Picture #: P3120083
Time: 1:57 p.m.
Location: central area of OHD004469300
Subject: These drums labeled "Cyanide Waste" are not closed, except for the blue drum in the bottom left corner of the photograph. The open-top drums are covered by round pieces of plywood or flattened cardboard boxes. This group of drums is also shown in P3120082.



Picture #: P3120084
Time: 1:58 p.m.
Location: central area of OHD004469300
Subject: This tote is nearly full of "cyanide waste." The pallet beneath the tote is above the secondary containment. This tote is also shown in photograph P3120085.



Picture #: P3120085

Time: 2:03 p.m.

Location: central area of OHD004469300

Subject: The four drums shown are in a group of six partially full drums labeled, "cyanide waste." According to Mr. Brian Stimer, this liquid can be reused. I lifted the covers and saw open top drums. The open top drums are covered by circular pieces of plywood or, in the example of the white drum in the center of this photograph, covered with a flattened cardboard box. There is no secondary containment beneath the wooden pallet.



Picture #: P3120086

Time: 2:11 p.m.

Location: central area of OHD004469300

Subject: According to Mr. Brian Stimer: the two totes contain fluid that removes Cosmolene²³; Mike Rock flies all over buying jet motors; Cosmolene gets on jet turbines; this fluid removes the Cosmolene and is a reusable product.

² According to Wikipedia, "Cosmolene is the genericized trademark for a generic class of rust preventatives, typically conforming to MIL-C-11796C Class 3, that are a brown colored wax like mass; have a slight fluorescence, and have a petroleum-like odor and taste (as detected when working with it)" (en.wikipedia.org/wiki/Cosmolene, accessed 10/18/13).

³ Cosmolene remover is solvent naphtha 50-60%, xylenes 30-40%, ethyl benzene 1-10% and has a flash point of 60° F. (www.cosmolinedirect.com, accessed 10/18/13)

Mr. Brian Stimer told the inspectors that Mr. Mike Rock of Roko Alloys was a sublessor until "the week before last." Mr. Brian Stimer explained that 500 gallons of the fluid is placed in a heated tank to strip jet parts.



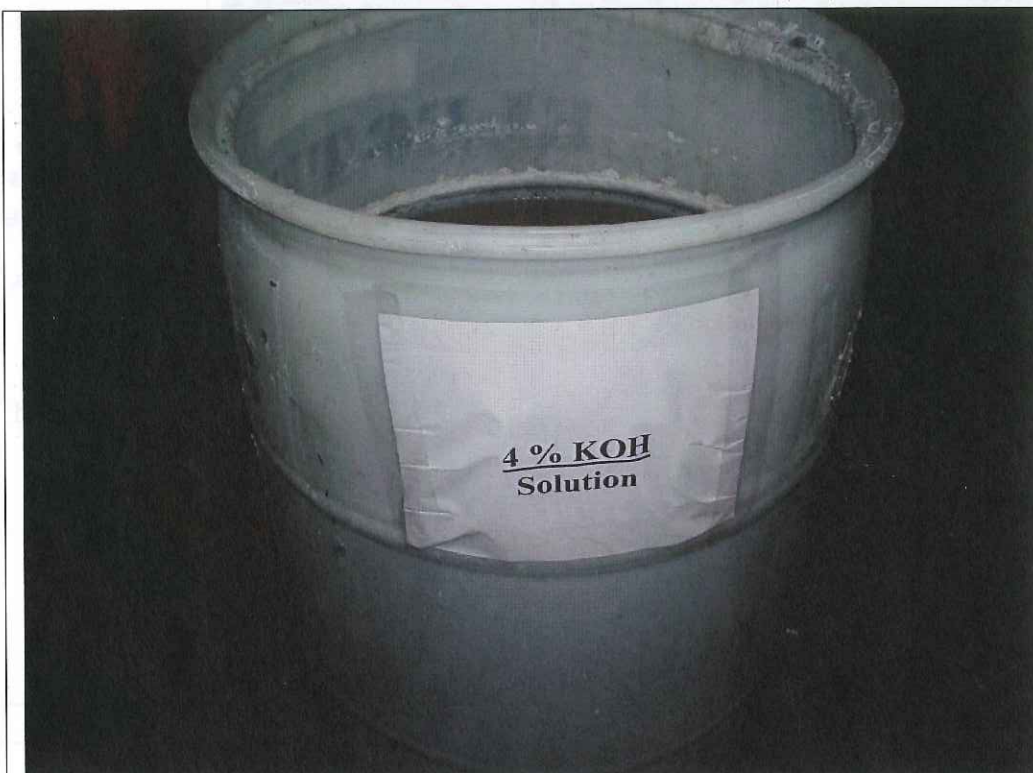
Picture #: P3120087
Time: 2:12 p.m.
Location: central area of OHD004469300
Subject: Various electronic parts waiting to be sorted include servers in the right foreground and boxes of keyboards left of central foreground.



Picture #: P3120088 **Time:** 2:13 p.m.
Location: central area of OHD004469300
Subject: There are bags of product potassium hydroxide (KOH) on the floor to the left. The industrial machinery on the left side belongs to Mike Rock according to Mr. Brian Stimer. The bulging, shrink-wrapped boxes (2 rows of pallets, 2 boxes high) on the right contain medical records.



Picture #: P3120089 **Time:** 2:14 p.m.
Location: central area of OHD004469300
Subject: The right side of P3120088 overlaps with the left side of this photograph. The cyclone fence at the right separates the leased area from the area that MDMR has an option to lease. The fence runs east-west. The boxes contain records and x-rays.



Picture #:
P3120090
Time: 2:20
p.m.
Location:
northern end of
OHD004469300
Subject: Mr.
Brian Stimer
said that the 55-
gallon drum of
4% KOH
solution was
from a "no
heat"
experiment.



Picture #:
P3120091
Time: 2:21
p.m.
Location:
northeastern
corner of
OHD004469300
operations
Subject:
Electronics to
be recycled.



Picture #:

P3120092

Time: 2:31 p.m.

Location:

central area of
OHD004469300
from western aisle

Subject: Boxes
of scrap waiting
to be sorted
include laptops,
flawed or
returned Eden
heaters,
humidifier, and
plastic cases.



Picture #:

P3120093

Time: 2:33
p.m.

Location:

central area of
OHD004469300,
toward the
north end.

Subject: Mr.
Brian Stimer
remarked that
we were
looking at
\$200,000 worth
of film. There
are nine
4'x4'x4' boxes
and one 55-
gallon drum of
film. The white
boxes are
coolers.



Picture #:
P3120094
Time: 2:34
p.m.
Location:
central area of
OHD004469300
Subject: Boxes
of batteries
have to be
sorted.
Inspector
Almquist
informed Mr.
Stimer that
MDMR may
have to pay to
dispose of the
alkaline
batteries.

Mr. Brian Stimer stated that he gets money for the nickel-cadmium and lithium batteries. Mr. Brian Stimer asked when PCBs were no longer allowed in manufactured items. He had just purchased 1500 switches manufactured in 1978.



Picture #:
P3120095
Time: 2:40
p.m.
Location:
central area of
OHD004469300
Subject: Boxes
of electrical
part B32231.
According to
the results of a
post-inspection
Google search
for "B32231,"
these are
metallized
polyester film
capacitors. The
cable has a
copper core,
based on color.



Picture #:
P3120096
Time: 2:40
p.m.
Location: west
aisle, central
area of
OHD004469300
Subject: Boxes
of various
electrical parts,
including a
Watt Hour
meter, batteries,
and capacitors.
The white
capacitors at the
bottom are the
same as shown
in P3120095.



Picture #:
P3120097
Time: 2:45
p.m.
Location: west
aisle, central
area of
OHD004469300
Subject:
American
Electric Power
(AEP)
performed a
meter change-
outs. MDMR
obtained the old
meters.

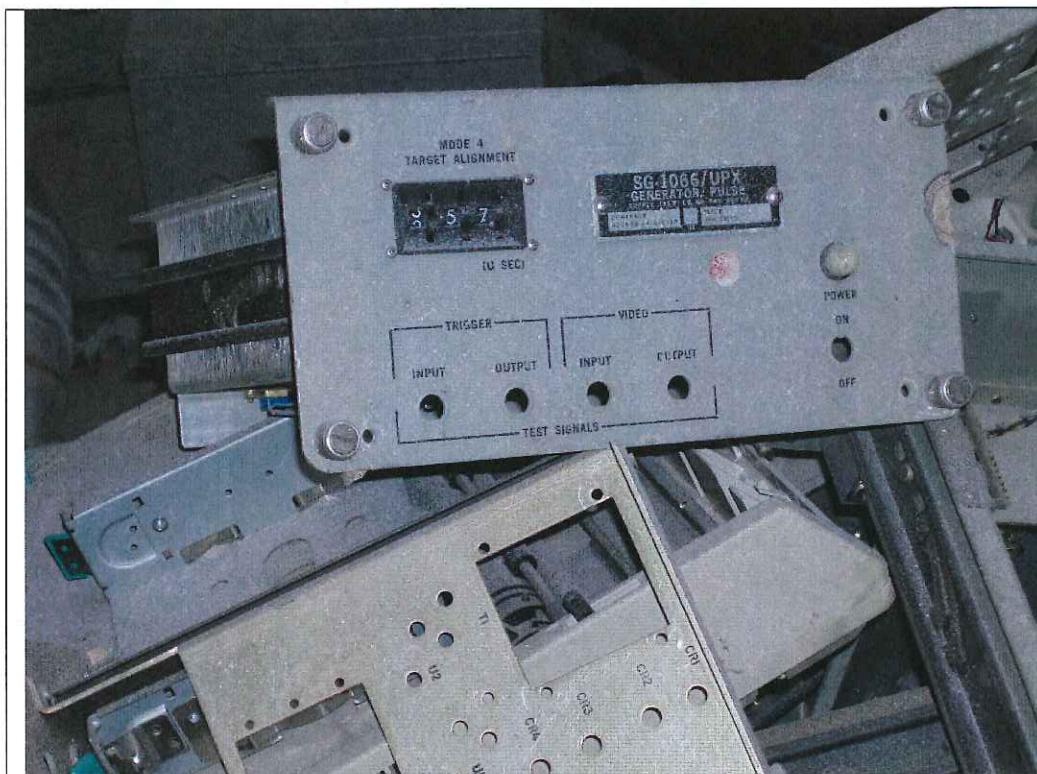
In addition to the wastes documented through photographs, I noted the presence of a glass crusher. Inspector Almquist and I cautioned Mr. Brian Stimer against receiving cathode ray tube glass because of the poor market for lead-bearing glass.



Picture #:
P3120098
Time: 2:46
p.m.
Location:
central area of
OHD004469300
Subject: The
wide variety of
electrical
components,
including scrap
motors and
paper
shredders,
received by
MDMR is
shown in this
photo. Also, a
lot of sorting
remains to be
done.



Picture #:
P3120099
Time: 2:51 p.m.
Location:
central area of
OHD004469300
Subject: Mr.
Brian Stimer
identified the
larger parts as
microwave
amplifiers.



Picture #:
P3120100
Time: 2:57
p.m.
Location:
central area of
OHD004469300
Subject: Mr.
Brian Stimer
identified this
scrap as from
Viet Nam war
era jets.

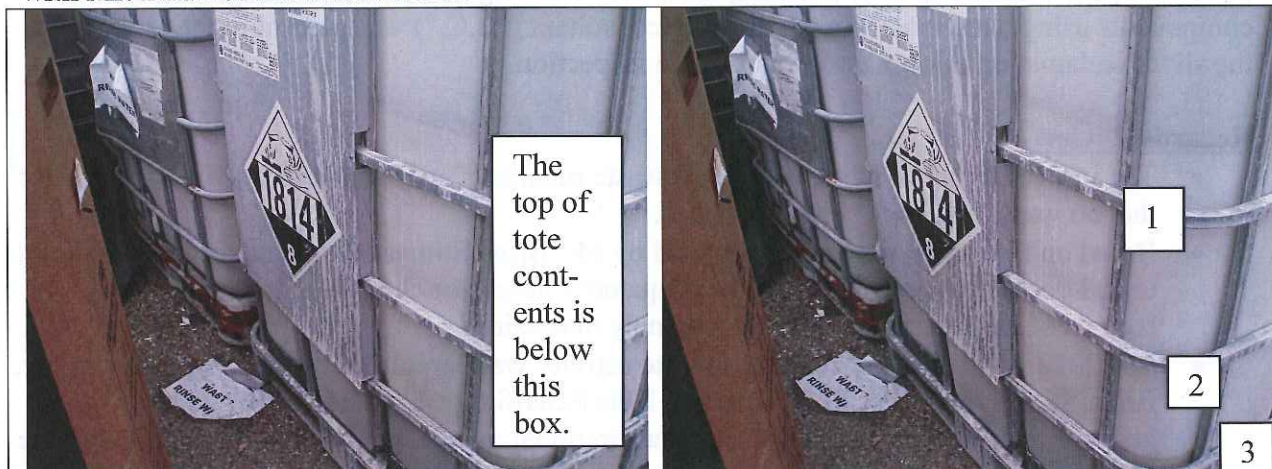


Picture #:
P3120101
Time: 3:01
p.m.
Location:
central area of
OHD004469300
Subject: These
four buckets are
on secondary
containment.
The funnels are
lined with filter
paper. The filter
paper holds
reclaimed
precious metal.

The reclaimed metal can be melted in a countertop muffle furnace on-site. I observed the furnace and remember it being smaller than 3' by 3' by 3'.

The site tour wound down with MDMR representatives stating that the business is selling circuit boards to make money at this point. Inspector Almquist provided Ohio EPA pollution prevention and regulatory information.

Inspector Almquist and I walked outside to the parking lot with Mr. Brett Stimer. We observed many totes with product KOH warnings and labels. He stated that the KOH was used to strip sand out of aircraft parts. The waste rinse water totes belong to Roko Alloys. This was consistent with Mr. Brian Stimers statements.



Picture #: P3120102

Time: 3:16 p.m.

Location: At the yellow arrow on the site map at the beginning of the Site Tour section of this report.

Subject: The tote on the right contains about 75 gallons of sand, based on the total tote capacity.

Picture #: P3120103

Time: 3:16 p.m.

Location: At the yellow arrow on the site map at the beginning of the Site Tour section of this report.

Subject: Same tote as in P3120102. Note that the tote is darker below the third-down horizontal metal bar.



Picture #: P3120104

Time: 3:17 p.m.

Location: At the yellow arrow on the site map at the beginning of the Site Tour section of this report.

Subject: The entrance to MDMR is obscured by the plastic totes in the gravel yard. The gable end of the building occupied by Goodwill Industries is at the top right of the photograph. The Stimer brothers attributed the presence of the plastic totes and other objects outside to Roko Alloys. The building occupied by MDMR is barely visible at the top left.

In summary, all of the materials that were labeled as “waste” were claimed by Mr. Brian Stimer to still be “in use.” In contrast to the large quantity generator activity from the Notification of Regulated Waste Activity (EPA Form 8700-12 or Ohio EPA Form 9029), no waste on-site was labeled with the words, “Hazardous Waste.” There was not a floor plan with emergency equipment locations labeled. Multiple shop vacs and at least one fork truck were on-site. Both Brett Stimer and Brian Stimer wore cell phones for emergency communications. I saw ten or fewer young (I estimate in their twenties) men were working at tables separating electronic components using hand tools. An engineering consultant (“B.C.”) was present in the vicinity of the silver reclamation pilot plant for part of the inspection.

Records Review

- The inspectors asked to see hazardous waste manifests and were told by Mr. Brett Stimer that no waste had been shipped off-site.
- Based on the verbal responses provided by Mr. Brian Stimer before and during the site tour, I decided to not complete a large quantity generator checklist. Apparently no records of waste management are routinely maintained.
- The 2012 notification of regulated waste activity was completed by a young man that Mr. Brian Stimer regards as like a son, Mr. Kyle Schaffernocker. The “large quantity generator” category may have been an aspirational misunderstanding of regulation on the part of Mr. Brian Stimer.
- The 2011 notification of regulated waste activity was completed by Mr. Chris Short, characterized by Mr. Brian Stimer as “like an independent contractor.” Mr. Brian Stimer stated that Mr. Short no longer works for MDMR.
- Mr. Al Gotch is identified as a MDMR contact identified online at: Recycler’s World, www.recycle.net/trade/aa1151487.html; Global Recycling Network, <http://www.grn.com/trade/aa1151487.html>; Metalworld, <http://www.metalworld.com/trade/aa1151487.html>; and Exchange System.net – Electronics, electronics.exchangesystem.net/trade/aa1151487.html (all accessed on March 8, 2013 and October 23, 2013, by Sue Brauer). Mr. Brian Stimer stated that Dr. Al Gotch is no longer employed by MDMR.
- Other technical advisors to MDMR may be found through Google searches of the company name (e.g., <http://gotopatentlawfirm.com/stan-prybyla-ph-d/>, accessed October 23, 2013).
- Waste collection events served by MDMR can be found through Google searches, too. “This Saturday, Jan. 19, noon-4 p.m., Minerva Local School District invites you to drop off all you[r] unwanted old electronics (computers, cell phones, etc.) at the bus garage on East Street. Donations of \$5 per car or truckload, regardless of size, are requested and will benefit Minerva Schools. No appliances will be accepted. Televisions will be accepted for \$10 each. This event is sponsored by Modern Day Mining and Refining, which has a 100% zero landfill policy. For information, call 330-224-2731.” According to the Google search results, there are 248 listings like this (https://www.facebook.com/permalink.php?id=136972053116027&story_fbid=196753720471193 accessed October 23, 2013).

- Modern Day Mining and Refining maintains a webpage, <http://www.moderndaymr.com/>, accessed via <http://www.betterbuilt.com/recycle.aspx>.

Closing Conference

Mr. Almquist again provided Ohio EPA regulatory and pollution prevention handouts. We summarized the labeling and waste identification issues identified during the inspection. I left the facility at about 3:30 p.m.

Post-Inspection

Prior to completion of this inspection report, Inspector Almquist notified me of a complaint received by OEPA. Details of the complaint and follow up by OEPA are documented separately.

Attachments

- A. Inspection Diagram
- B. Business cards
- C. OEPA Photographs and Notes

ATTACHMENT A

Inspection Diagram

ATTACHMENT B

Business Cards



John R. Kasich, Governor
• Scott J. Nally, Director

www.epa.ohio.gov

Environmental Protection Agency

Robert Almquist
Environmental Specialist II
Division of Materials and Waste Management

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330 | 963-1217 330 | 487-0769 Fax

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Modern Day MINING & REFINING

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CEO

330-418-4010 • Brett@ModernDayMR.com
818 Mulberry Road, SE • Canton, Ohio 44707

Modern Day MINING & REFINING

- Electronic Waste Recycling & Refining
- X-Ray Film Recycling & Refining
- We Buy & Sell Gold

100% Zero Landfill Policy

U.S. EPA ID Number: **OHD004469300**

Modern Day MINING & REFINING

Gregg Cole
Process Specialist

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818 Mulberry Road SE, Suite M, Canton, Ohio 44707

Modern Day MINING & REFINING

- Plastics Densifying
- Toll Grinding & Toll Pelletizing
- X-Ray Film Recycling & Refining
- Electronic Waste Recycling & Refining

100% Zero Landfill Policy

U.S. EPA ID Number: **OHD004469300**

- Pelletizing
- Toll Grinding
- Densifying
- Closed Loop
Re-Pelletizing

PolyPro SOLUTIONS

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- Pelletizing
- Toll Grinding
- Densifying
- Closed Loop
Re-Pelletizing

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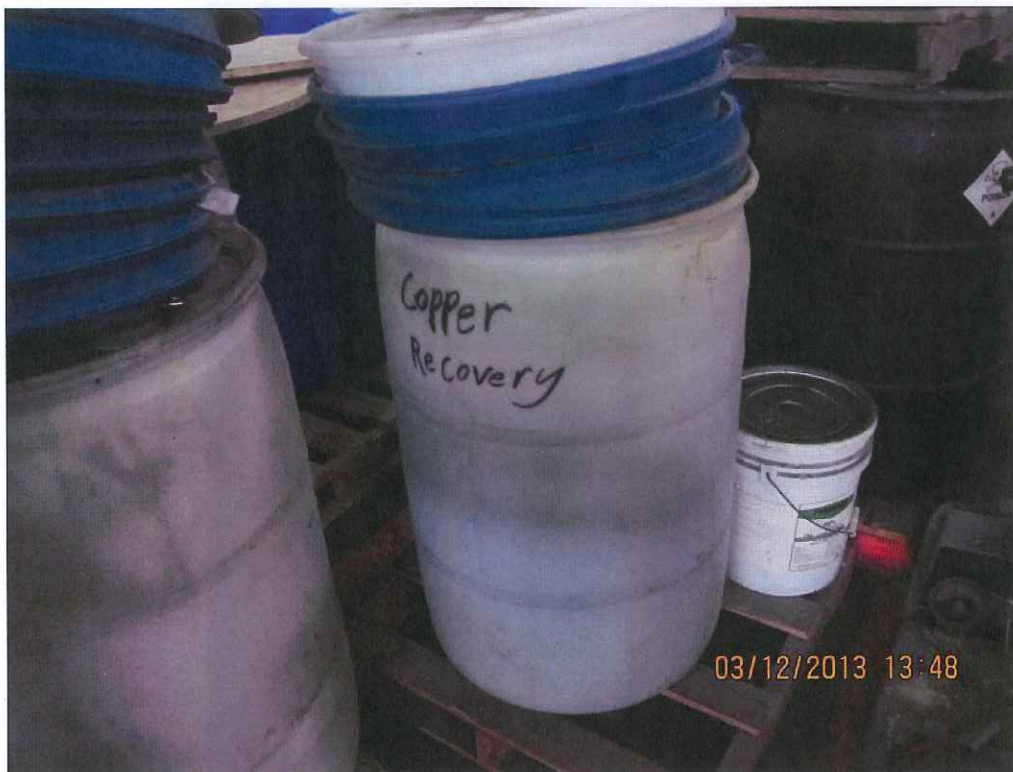
Attachment C
OEPA Photographs
and Notes

Brauer, Sue

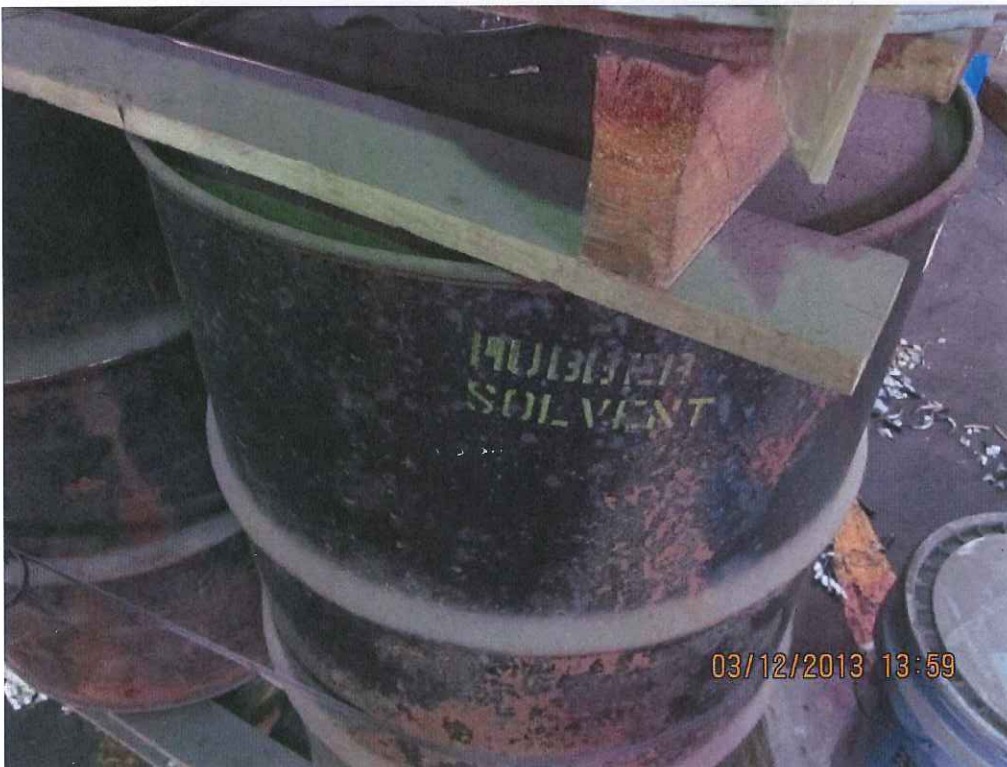
From: Almquist, Robert [Robert.Almquist@epa.state.oh.us]
Sent: Tuesday, March 26, 2013 3:25 PM
To: Brauer, Sue
Cc: Almquist, Robert
Subject: Modern Day Mining & Refining
Attachments: park and Mofern 023.jpg; park and Mofern 017.jpg; park and Mofern 018.jpg; park and Mofern 019.jpg; park and Mofern 020.jpg; park and Mofern 021.jpg; park and Mofern 022.jpg

I'm just getting to writing up my notes. Sorry it's taken so long but I had a big project going and was out sick 4 days. I heard you had some health problems after the inspection with John. I hope you are doing good now. Here are the photos I took which I'll incorporate into the notes.

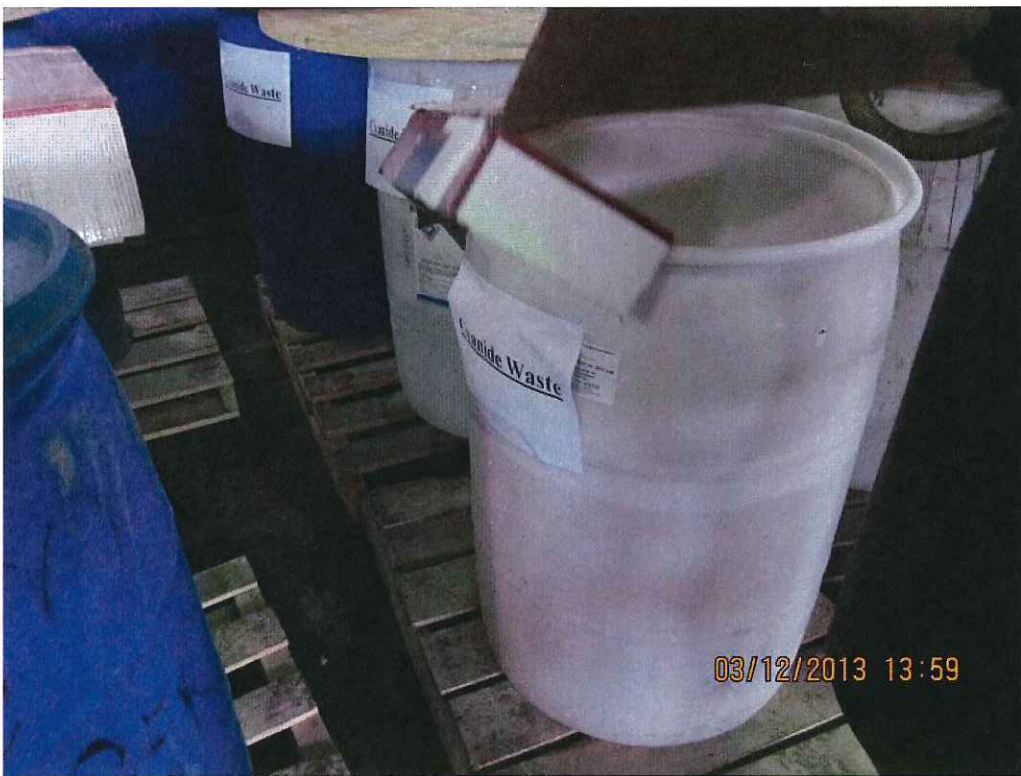
Robert Almquist
Ohio Environmental Protection Agency
Division of Materials and Waste Management
2110 East Aurora Road
Twinsburg, OH 44087
Phone 330-963-1217
Fax 330-487-0769



Robert Almquist photograph "park and Mofern 017.jpg"



Robert Almquist photograph "park and Mofern 018.jpg"



Robert Almquist photograph "park and Mofern 019.jpg"



Robert Almquist photograph "park and Mofern 020.jpg"



Robert Almquist photograph "park and Mofern 021.jpg"



Robert Almquist photograph "park and Mofern 022.jpg"



Robert Almquist photograph "park and Mofern 023.jpg"

Brauer, Sue

From: Almquist, Robert [Robert.Almquist@epa.state.oh.us]
Sent: Wednesday, March 27, 2013 12:23 PM
To: Brauer, Sue
Cc: Popotnik, Frank; Oryshkewych, Natalie; Almquist, Robert
Subject: Modern Day Mining and Refining
Attachments: Modern Day Mining 3-12-13 notes.docx

Here are my typed notes from your 3-12-13 inspection of Modern Day Mining and Refining. Let me know if you have any questions.

Robert Almquist
Ohio Environmental Protection Agency
Division of Materials and Waste Management
2110 East Aurora Road
Twinsburg, OH 44087
Phone 330-963-1217
Fax 330-487-0769

Modern Day Mining & Refining, 3-12-13, inspection by Susan Brauer, USEPA, notes here by Robert Almquist, Ohio EPA

While walking into the place I noticed a car battery on the ground outside the door. Once inside I saw a bin of small cans. We met with Brett Stimer, CEO. He said they do metals recycling. Brett called Brian Stimer, President on the phone (who also I think is Brett's brother.) Brian talked to Susan and asked us to wait till he got there. Brett said they are in the process of setting up a lab and a fume scrubber. He said they are looking to get into precious metals recovery and then they will use chemicals. There is a guy here today that is demonstrating the chemicals. They do resale on monitors. They don't process them. Lead acid batteries go out to PSC for recycle.

Brian then arrived. He said they take in circuit boards. They are trying to set up a film line to strip the silver from x-ray film, both from metallurgical and health care. They will use a caustic soda for this. He wants to have no silver going out into the water going to the sewer. He will work with Canton Wastewater Treatment Plant on this system.

They grind up plastic (such as packing peanuts) and make them into pellets for use in plastic molding. The pellets go into hot water to clean them and since it is hot they dry out quickly. They currently take in circuit boards and resell them as is. Their facility is 38,000 square feet. Now they just process plastic and take in circuit boards. There are 21 employees in the building though some of them work for Poly-Pro which is a different company that does the plastic pelletizing. Brian is also involved in that company.

We started the facility tour with Brian. We saw the tank that holds water from processing the waste X-ray film. They are in the process of setting this system up so they can recover that silver using a filter press. The filter cake will then be processed to get the silver out. The treated water will be discharged to the city sewers. While we were there, they talked on the phone to George Rhode with the City of Canton regarding this discharge. He told them he would come out and see their system.

I took a photo of a drum of copper recovery solution. This is left over from the work Chris Short was doing. Chris Short worked here as an independent contractor but no longer works here. Brian plans to recover copper from this solution.

There were 3 drums with a metal band around them. Brian said they were here when they moved into the building and he doesn't think he'll use them. I told him if he can't use them then he needs to contact a hazardous waste disposal company and have them come out and give him a quote for their disposal. I said there are some such local companies listed on the documents I gave him. I took a photo of one of the drums which was labeled rubber solvent. Another one was labeled air brake antifreeze.

We saw 6 drums and one tote labeled cyanide waste but Brian believes there is gold in the solution so he will process it more so he says it is not a waste. He thinks they (employees that he fired that used to work during the night that he thinks were stealing from him) had plans to come back and get the gold out. I took three photos of these containers.

We saw three totes that were from Mike with Roko Alloys out of Massillon. Mike rented space here and it's only been a week since he moved out. Brian said Mike will come to get the totes. They contain a solution that takes cosmoline off engines. I took two photos of these totes.

We saw a container of 4% KOH solution. Brian said it has been used and will be used more. We saw a box of waste batteries, mostly alkaline. I said you probably have to pay to get rid of them and that on the documents I gave you are companies listed that can take them. Brian said he gets money for the Ni-Cd and Lithium batteries. We said goodbye to Brian.

We looked outside in the front parking lot with Brett Stimer. He said the totes there were either empty or had silicon sand in them. They are from Mike Roko (like the totes inside mentioned above). We said goodbye to Brett and left the site.